

**ENGINEERING STATEMENT  
IN SUPPORT OF THIRD AMENDMENT TO JOINT PETITION  
FOR RULE MAKING  
KIMO-DT, ANCHORAGE, ALASKA  
CHANNEL 12 41 KW MAX. 240 METERS  
APRIL 2004**

This engineering statement has been prepared on behalf of Smith Television License Holdings, Inc., licensee of station KIMO(TV), and permittee of KIMO-DT, Anchorage, Alaska in support of a Third Amendment to Joint Petition for Rule Making filed on February 20, 2003 and previously amended on July 24, 2003 and March 12, 2004, ("JPRM") to substitute Channel 12 for the allotted Channel 30 for its digital television (DTV) operation on KIMO-DT.

At present KIMO(TV) operates on analog Channel 13 (210-216 MHz) with 316 kW effective radiated power (ERP) and 238 meters antenna height above average terrain (HAAT) using a non-directional TV antenna from the Frank A. Mengel tower site ("F.A.M. Tower Site"). The geographic coordinates of that site are as follows: N 61° 25' 22", W 149° 52' 20". The F.A.M Tower Site is located approximately 22.7 km (14 miles) north of Anchorage.

The Commission has allotted KIMO(TV) Channel 30 for its digital television (DTV) operation with 1000 kW ERP and 238 meters HAAT. KIMO-DT currently holds a construction permit to operate on DTV Channel 30 with 108 kW ERP and 155 meters HAAT using a directional TV antenna from the F.A.M. Tower site.

In the JPRM, the licensees/permittees of stations KIMO(TV)/KIMO-DT, KTUU-TV/KTUU-DT and KAKM(TV)/KAKM-DT proposed the following amendment to Section 73.622(b) (Digital Television Table of Allotments) of the Commission's rules.

<u>Community</u>	<u>Current Allotment</u>	<u>Proposed Allotment</u>
Anchorage, AK	18, 20, 22, *24, *26 28, 30, 32	*8, 10, 12, 20, 22, *26, 30, 32

The JPRM specified that the substitute DTV channels would be used by the respective DTV stations at the F.A.M. Tower Site. The Third Amendment to the JPRM

(“Third Amendment”) proposes further changes to the maximum power levels and/or directional antenna system for each DTV allotment. Specifically, the Third Amendment, as it applies to KIMO-DT specifies a slightly different power level for the station. The amended Channel 12 DTV allotment for station KIMO-DT is for 41 kW maximum ERP and 240 meters HAAT (271 meters antenna radiation center above mean sea level) from the F.A.M. Tower Site which is the licensed site for KIMO(TV). The geographic coordinates of the KIMO(TV) site, and thus for the collocated KIMO-DT site, are set forth above.

The attached Table I provides the relative field values for the directional horizontal pattern of the directional antenna associated with the KIMO-DT Channel 12 DTV allotment.

#### Analog TV and DTV Allocation Situation

The attached Table II shows the analog TV and DTV stations within 500 km of KIMO-DT site on co-channel 12 and adjacent channels 11 and 13. There are no TV or DTV stations or allotments on Channel 12 within 500 km of KIMO-DT site. Station KTVA-TV, Channel 11, Anchorage, Alaska, site is located 25.7 km south of the KIMO-DT site.

#### OET Bulletin 69 Study

Since the licensed KTVA, Channel 11 antenna site is located more than 11 km and less than 125 km from the KIMO-DT site, an electromagnetic interference study was conducted according to the FCC OET Bulletin 69 to determine any impact on KTVA’s analog TV operation.

The FCC OET Bulletin 69 study was conducted for cell sizes 0.5 km/side and

1 km terrain intervals. In addition, the KIMO-DT ERP in each direction was adjusted according to the horizontal directional pattern of the DTV antenna. The vertical pattern of the proposed DTV antenna was not used in the study.

The results of the OET Bulletin 69 study are provided in the attached Table III, and indicate the proposed Channel 12 DTV operation of KIMO-DT would not cause harmful interference to more than 2% population of the Grade B contour of KTVA-TV. Therefore, the proposed Channel 12 DTV operation at Anchorage, Alaska would be in compliance of Section 73.623(c) of the Commission's rules.

**Principal Community Coverage**

The attached map shows the computed 36 dBu contour for the proposed KIMO-DT operation on Channel 12 with 41 kW maximum ERP and 240 meters HAAT using a directional antenna. The map indicates the proposed 36 dBu contour would cover all of Anchorage, Alaska.

It has been demonstrated above that the proposed substitution of Channel 12 for Channel 30 would be in full compliance with the Commission's rules. Therefore, Smith Television License Holdings, Inc., respectfully requests the Commission to allot Channel 12 for KIMO(TV) for its DTV operation (KIMO-DT) at Anchorage, Alaska.

Under penalty of perjury the undersigned states that the foregoing statement has been prepared by him and that the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts, he believes them to be true.

5 April 2004

S. K. Khanna  
Professional Engineer

**KHANNA & GULL, Inc. – Consulting Engineers**

**District of Columbia, PE License No.8057**

TABLE I  
KIMO-DT. CHANNEL 12, ANCHORAGE, ALASKA  
HORIZONTAL DIRECTIONAL RADIATION PATTERN  
APRIL 2004

<u>AZIMUTH</u>	<u>RELATIVE FIELD</u>	<u>ERP/kW</u>
0.0	0.710	20.67
10.0	0.800	26.24
20.0	0.870	31.03
30.0	0.950	37.00
40.0	0.960	37.79
50.0	0.900	33.21
60.0	0.820	27.57
70.0	0.740	22.45
80.0	0.680	18.96
90.0	0.640	16.79
100.0	0.730	21.85
110.0	0.830	28.25
120.0	0.940	36.23
130.0	0.970	38.58
140.0	0.940	36.23
150.0	0.840	28.93
160.0	0.750	23.06
170.0	0.690	19.52
180.0	0.680	18.96
190.0	0.750	23.06
200.0	0.830	28.24
210.0	0.910	33.95
220.0	0.930	35.46
230.0	0.890	32.48
240.0	0.810	26.90
250.0	0.740	22.45
260.0	0.690	19.52
270.0	0.700	20.09
280.0	0.780	24.94
290.0	0.870	31.03
300.0	0.940	36.92
310.0	0.940	36.23
320.0	0.860	30.32
330.0	0.800	26.24
340.0	0.710	20.67
350.0	0.660	17.86
37.0	1.000	41.00
129.0	1.000	41.00

TABLE II  
ANALOG TV AND DTV ALLOCATION SITUATION  
FOR THE PROPOSED DTV OPERATION OF  
KIMO-DT, ANCHORAGE, ALASKA  
CHANNEL 12 41 KW 240 METERS  
APRIL 2004

<u>CHANNEL</u>	<u>CALL</u>	<u>CITY/ STATE</u>	<u>GEOGRAPHIC COORDINATES</u>	<u>DISTANCE km</u>
12	KIMO-DT	Anchorage, AK	N 61-25-22 W 149-52-20	--
11	KTVA(TV) LIC	Anchorage, AK	N 61-11-33 W 149-54-01	25.7
12	None within 500 km		--	--
13	KIMO(TV) LIC	Anchorage, AK	N 61-25-22 W 149-52-20	0.0

TABLE III

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 04-01-2004 Time: 18:17:29

Record Selected for Analysis

NEW USERRECORD-01 ANCHORAGE  
 AK US  
 Channel 12 ERP 41. kW HAAT 240. m RCAMSL 00271 m  
 Latitude 061-25-22 Longitude 0149-52-20  
 Status APP Zone 2 Border  
 Dir Antenna Make usr Model KTUUH Beam tilt N Ref Azimuth  
 0.  
 Last update Cutoff date Docket  
 Comments  
 Applicant

Cell Size for Service Analysis 0.5 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	20.668	227.7	94.1
45.0	35.461	202.5	95.9
90.0	16.794	270.3	95.1
135.0	37.393	260.2	101.0
180.0	18.958	270.9	96.1
225.0	33.952	239.2	98.9
270.0	20.090	235.4	94.5
315.0	33.210	217.2	96.8

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

NEW 12 ANCHORAGE  
 AK USERRECORD01



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and station

SHORT TO: KTVA 11 ANCHORAGE AK BLCT 19831019KM  
 061-11-33 0149-54- 1  
 Req. separation => 11.0 <= 125.0 Actual separation 25.7 Short 99.3(  
 14.7) km

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountian

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

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## Start of Interference Analysis

Channel	Call	Proposed Station City/State	ARN
12	NEW	ANCHORAGE	
AK	USERRECORD01		

## Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
11	KTVA	ANCHORAGE AK	0.0	CP	BPCT	-
20010426AAO						
11	KTVA	ANCHORAGE AK	25.6	LIC	BLCT	-
19831019KM						
13	KIMO	ANCHORAGE AK	0.0	LIC	BLCT	-
19960320KE						

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## Analysis of Interference to Affected Station 1

### NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
11	KTVA	ANCHORAGE AK	DTVPLN	-NPLN0694

## Stations Potentially Affecting This Station

# KHANNA & GULL, Inc. - Consulting Engineers

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
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Results for: 11N AK ANCHORAGE

	DTVPLN	NPLN0694	PLN
within Noise Limited Contour	POPULATION 250632	AREA (sq km) 10652.7	
not affected by terrain losses	249923	9759.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	0	0.0	

## Analysis of current record

Channel	Call	City/State	Application Ref. No.
11	KTVA	ANCHORAGE AK	BPCT -20010426AAO

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
11	KTVE	FAIRBANKS AK	395.3	LIC	BLCT -
12	NEW	ANCHORAGE			
AK	0.0	APP	USERRECORD-01		
Proposal causes no interference					

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## Analysis of Interference to Affected Station 2

## Analysis of current record

Channel	Call	City/State	Application Ref. No.
11	KTVA	ANCHORAGE AK	BLCT -19831019KM

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
12	NEW	ANCHORAGE			
AK	25.6	APP	USERRECORD-01		

Total scenarios = 2

Result key: 1  
Scenario 1 Affected station 2  
Before Analysis

Results for: 11N AK ANCHORAGE

	BLCT	19831019KM	LIC
within Noise Limited Contour	POPULATION 250632	AREA (sq km) 10652.7	
not affected by terrain losses	249923	9759.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	

# KHANNA & GULL, Inc. - Consulting Engineers

lost to all IX 0 0.0

Potential Interfering Stations Included in above Scenario 1

## After Analysis

Results for: 11N AK ANCHORAGE	BLCT	19831019KM	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	250632	10652.7	
not affected by terrain losses	249923	9759.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	4819	864.1	
lost to all IX	4819	864.1	

Potential Interfering Stations Included in above Scenario 1

## 12A AK ANCHORAGE

USERRECORD01 APP

Result key: 2  
 Scenario 2 Affected station 2  
 Before Analysis

Results for: 11N AK ANCHORAGE	BLCT	19831019KM	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	250632	10652.7	
not affected by terrain losses	249923	9759.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	0	0.0	

Potential Interfering Stations Included in above Scenario 2

## After Analysis

Results for: 11N AK ANCHORAGE	BLCT	19831019KM	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	250632	10652.7	
not affected by terrain losses	249923	9759.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	4819	864.1	
lost to all IX	4819	864.1	

Potential Interfering Stations Included in above Scenario 2

## 12A AK ANCHORAGE

USERRECORD01 APP

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Analysis of Interference to Affected Station 3

# KHANNA & GULL, Inc. - Consulting Engineers

## NTSC Baseline Analysis

Channel	Call	City/State	Application Ref. No.
13	KIMO	ANCHORAGE AK	DTVPLN -NPLN0809

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
13	NEW	FAIRBANKS AK	395.3	PLN	DTVPLN -

NPLN0810

Results for: 13N AK ANCHORAGE	DTVPLN	NPLN0809	PLN
	POPULATION	AREA (sq km)	
within Noise Limited Contour	264909	26134.5	
not affected by terrain losses	263914	22253.3	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	0	0.0	

## Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KIMO	ANCHORAGE AK	BLCT -19960320KE

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
13	960917KG	FAIRBANKS AK	395.3	APP	BPCT -
19960917KG					
13	960920LC	FAIRBANKS AK	403.7	APP	BPCT -
19960920LC					
13	960920YE	FAIRBANKS AK	394.8	APP	BPCT -
19960920YE					
13	970331KQ	FAIRBANKS AK	394.8	APP	BPCT -
19970331KQ					
13	970331LK	FAIRBANKS AK	394.5	APP	BPET -
19970331LK					
12	NEW	ANCHORAGE			
AK	0.0	APP			USERRECORD-01
Proposal causes no interference					

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## Analysis of Interference to Affected Station 4

## Analysis of current record

Channel	Call	City/State	Application Ref. No.
12	NEW	ANCHORAGE	
AK	USERRECORD-01		

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
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KHANNA & GULL, Inc. - Consulting Engineers

11	KTVA	ANCHORAGE AK	0.0	CP	BPCT	-
20010426AAO						
13	KIMO	ANCHORAGE AK	0.0	LIC	BLCT	-
19960320KE						

Total scenarios = 1

Result key: 3  
 Scenario 1 Affected station 4  
 Before Analysis

Results for: 12A AK ANCHORAGE

USERRECORD01	APP	
HAAT	240.0 m,	ATV ERP 41.0 kW
	POPULATION	AREA (sq km)
within Noise Limited Contour	265309	29521.2
not affected by terrain losses	264283	25636.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

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**ENGINEERING STATEMENT  
IN SUPPORT OF THIRD AMENDMENT TO JOINT PETITION  
FOR RULE MAKING  
KAKM-DT, ANCHORAGE, ALASKA  
CHANNEL 8 50 KW MAX. 240 METERS  
APRIL 2004**

This engineering statement has been prepared on behalf of Alaska Public Telecommunications, Inc., licensee of station KAKM(TV), and permittee of KAKM-DT, Anchorage, Alaska in support of a Third Amendment to Joint Petition for Rule Making filed on February 20, 2003 and previously amended on July 24, 2003 and March 12, 2004, ("JPRM") to substitute Channel 8 for the allotted Channel 24 for its digital television (DTV) operation.

At present KAKM(TV) operates on analog Channel 7 (174-180 MHz) with 288 kW effective radiated power (ERP) and 240 meters antenna height above average terrain (HAAT) using a non-directional TV antenna from the Frank A. Mengel tower site ("F.A.M. Tower Site"). The geographic coordinates of that site are as follows: N 61° 25' 22", W 149° 52' 20". The F.A.M Tower Site is located approximately 22.7 km (14 miles) north of Anchorage.

The Commission has allotted KAKM(TV) Channel 24 for its digital television (DTV) operation with 1000 kW ERP and 240 meters HAAT. KAKM-DT currently holds a construction permit to operate on DTV Channel 24 with 50 kW ERP and 109 meters HAAT using a non-directional TV antenna from an antenna site which is located in downtown Anchorage, Alaska.

In the JPRM, the licensees/permittees of stations KAKM(TV)/KAKM-DT, KTUU-TV/KTUU-DT and KIMO(TV)/KIMO-DT proposed the following amendment to Section 73.622(b) (Digital Television Table of Allotments) of the Commission's rules.

<u>Community</u>	<u>Current Allotment</u>	<u>Proposed Allotment</u>
Anchorage, AK	18, 20, 22, *24, *26 28, 30, 32	*8, 10, 12, 20, 22, *26, 30, 32

The JPRM specified that the substitute DTV channels would be used by the respective DTV stations at the F.A.M. Tower Site. The Third Amendment to the JPRM (“Third Amendment”) proposes further changes to the maximum power levels and/or directional antenna system for each DTV allotment. Specifically, the Third Amendment, as it applies to KAKM-DT specifies a slightly different power level for the station. The amended Channel 8 DTV allotment for station KAKM-DT is for 50 kW maximum ERP and 240 meters HAAT (271 meters antenna radiation center above mean sea level) from the F.A.M. Tower Site which is the licensed site for KAKM(TV). The geographic coordinates of the KAKM(TV) site, and thus for the collocated KAKM-DT site, are set forth above.

The attached Table I provides the relative field values for the directional horizontal pattern of the directional antenna associated with the KAKM-DT Channel 8 DTV allotment.

#### Analog TV and DTV Allocation Situation

The attached Table II shows the analog TV and DTV stations within 500 km of KAKM-DT site on co-channel 8 and adjacent channels 7 and 9. There are no TV or DTV stations or allotments on Channel 8 within 500 km of KAKM-DT site. The FCC database shows there are two pending applications for Channel 9 analog TV station at Anchorage, Alaska. These applications have been filed by Alaska Broadcast TV, Inc. (“ABTV”) (BPET-19960916KE) and Alaska Public Telecommunications (“APT”) (BPET-19961115KE). The proposed ABTV Channel 9 analog TV antenna site is located 40.2 km south of KAKM-DT. The proposed APT Channel 9 analog TV site is co-located with KAKM-DT site. ABTV and APT have filed with the Commission a “Joint Request



for Approval of Agreement” (“joint Request”) which, if granted, will result in the dismissal of APT’s Channel 9 analog TV application and the grant of ABTV’s Channel 9 analog TV application.

**OET Bulletin 69 Study**

Since the ABTV Channel 9 antenna site is located more than 11 km and less than 125 km from the KAKM-DT site, an electromagnetic interference study was conducted according to the FCC OET Bulletin 69 to determine any impact on ABTV’s analog Channel 9 operation.

The FCC OET Bulletin 69 study was conducted for cell sizes 0.5 km/side and 1 km terrain intervals. In addition, the KAKM-DT ERP in each direction was adjusted according to the horizontal directional pattern of the DTV antenna. The vertical pattern of the proposed DTV antenna was not used in the study.

The results of the OET Bulletin 69 study are provided in the attached Table III, and indicate the proposed Channel 8 DTV operation of KAKM-DT would cause interference to 3.3% population of the Grade B contour of ABTV’s proposed Channel 9 operation. However, as shown in Section 2 of the Settlement Agreement which is attached to the Joint Request ABTV has agreed to accept any interference caused by the proposed KAKM-DT operation on Channel 8 with up to 100 kW.

**Principal Community Coverage**

The attached map shows the computed 36 dBu contour for the proposed KAKM-DT operation on Channel 8 with 50 kW maximum ERP and 240 meters HAAT using a directional antenna. The map indicates the proposed 36 dBu contour would cover all of Anchorage, Alaska.

It has been demonstrated above that the proposed substitution of Channel 8 for Channel 24 would be in compliance with the Commission's rules and policies.

Therefore, Alaska Public Telecommunications, Inc. respectfully requests the Commission to allot Channel 8 for KAKM(TV) for its DTV operation (KAKM-DT) at Anchorage, Alaska.

Under penalty of perjury the undersigned states that the foregoing statement has been prepared by him and that the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts, he believes them to be true.

5 April 2004

S. K. Khanna  
Professional Engineer  
District of Columbia, PE License No.8057

TABLE I  
KAKM-DT. CHANNEL 8, ANCHORAGE, ALASKA  
HORIZONTAL DIRECTIONAL RADIATION PATTERN  
APRIL 2004

<u>AZIMUTH</u>	<u>RELATIVE FIELD</u>	<u>ERP/kW</u>
0.0	0.710	25.21
10.0	0.800	32.00
20.0	0.870	37.85
30.0	0.950	45.13
40.0	0.960	46.08
50.0	0.900	40.50
60.0	0.820	33.62
70.0	0.740	27.38
80.0	0.680	23.12
90.0	0.640	20.48
100.0	0.730	26.65
110.0	0.830	34.45
120.0	0.940	44.18
130.0	0.970	47.05
140.0	0.940	44.18
150.0	0.840	35.28
160.0	0.750	28.13
170.0	0.690	23.81
180.0	0.680	23.12
190.0	0.750	28.13
200.0	0.830	34.45
210.0	0.910	41.41
220.0	0.930	43.25
230.0	0.890	39.61
240.0	0.810	32.81
250.0	0.740	27.38
260.0	0.690	23.81
270.0	0.700	24.50
280.0	0.780	30.42
290.0	0.870	37.85
300.0	0.940	45.03
310.0	0.940	44.18
320.0	0.860	36.98
330.0	0.800	32.00
340.0	0.710	25.21
350.0	0.660	21.78
37.0	1.000	50.00
129.0	1.000	50.00

TABLE II  
ANALOG TV AND DTV ALLOCATION SITUATION  
FOR THE PROPOSED DTV OPERATION OF  
KAKM-DT, ANCHORAGE, ALASKA  
CHANNEL 8 50 KW 240 METERS  
APRIL 2004

<u>CHANNEL</u>	<u>CALL</u>	<u>CITY/ STATE</u>	<u>GEOGRAPHIC COORDINATES</u>	<u>DISTANCE</u> km
8	KAKM-DT	Anchorage, AK	N 61-25-22 W 149-52-20	--
7	KAKM(TV)	Anchorage, AK	N 61-25-22 W 149-52-20	0.0
7	KFXF(TV)	Fairbanks, AK	N 64-55-20 W 147-42-55	404.9
8	None within 500 km		--	--
9	Application BPET-19960916KE	Anchorage, AK	N 61-04-02 W 149-44-36	40.2
9	Application BPET-19961115KE	Anchorage, AK	N 61-25-22 W 149-52-20	0.0

TABLE III

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 04-05-2004 Time: 09:19:06

Record Selected for Analysis

NEW USERRECORD-01 ANCHORAGE  
 AK US  
 Channel 08 ERP 50. kW HAAT 240. m RCAMSL 00271 m  
 Latitude 061-25-22 Longitude 0149-52-20  
 Status APP Zone 2 Border  
 Dir Antenna Make usr Model KTUUH Beam tilt N Ref Azimuth  
 0.  
 Last update Cutoff date Docket  
 Comments  
 Applicant

Cell Size for Service Analysis 0.5 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	25.205	227.7	95.7
45.0	43.245	202.5	97.4
90.0	20.480	270.3	96.7
135.0	45.601	260.2	102.6
180.0	23.120	270.9	97.6
225.0	41.405	239.2	100.5
270.0	24.500	235.4	96.1
315.0	40.500	217.2	98.4

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

NEW 08 ANCHORAGE

# KHANNA & GULL, Inc. - Consulting Engineers

AK USERRECORD01

and station

SHORT TO: 960916KE 09 ANCHORAGE AK BPET 19960916KE  
 061-04- 2 0149-44-36  
 Req. separation => 11.0 <= 125.0 Actual separation 40.2 Short 84.8(  
 29.2) km

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

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## Start of Interference Analysis

Channel	Call	Proposed Station City/State	ARN
08	NEW	ANCHORAGE	
AK	USERRECORD01		

## Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
07	KAKM	ANCHORAGE AK	0.0	LIC	BLET	-
19980917KE						
09	961115KE	ANCHORAGE AK	0.0	APP	BPET	-
19961115KE						
09	960916KE	ANCHORAGE AK	40.1	APP	BPET	-
19960916KE						

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## Analysis of Interference to Affected Station 1

### NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
07	KAKM	ANCHORAGE AK	DTVPLN	-NPLN0454

# KHANNA & GULL, Inc. - Consulting Engineers

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
07	KFXF	FAIRBANKS AK	392.2	PLN	DTVPLN	-

NPLN0455

Results for: 7N AK ANCHORAGE

	POPULATION	AREA (sq km)
within Noise Limited Contour	264909	26134.5
not affected by terrain losses	263914	22460.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to all IX	0	0.0

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
07	KAKM	ANCHORAGE AK	BLET	-19980917KE

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
07	KFXF	FAIRBANKS AK	403.7	LIC	BLCT	-

20010302ABT

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
08	NEW	ANCHORAGE AK	0.0	APP	USERRECORD-01	

Proposal causes no interference

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## Analysis of Interference to Affected Station 2

## NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
09	NEW	ANCHORAGE AK	DTVPLN	-NPLN0576

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
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Results for: 9N AK ANCHORAGE

	POPULATION	AREA (sq km)
within Noise Limited Contour	289136	28253.6
not affected by terrain losses	269649	24921.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to all IX	0	0.0

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
09	961115KE	ANCHORAGE AK	BPET	-19961115KE

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## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
09	KUAC-TV	FAIRBANKS AK	401.7	LIC	BLET	-319
08	NEW	ANCHORAGE				
AK	0.0	APP	USERRECORD-01			
Proposal causes no interference						

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## Analysis of Interference to Affected Station 3

### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
09	960916KE	ANCHORAGE AK	BPET	-19960916KE

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
08	NEW	ANCHORAGE				
AK	40.1	APP	USERRECORD-01			

Total scenarios = 1

Result key: 1  
Scenario 1 Affected station 3  
Before Analysis

Results for:	9N AK ANCHORAGE	BPET	19960916KE	APP
		POPULATION	AREA (sq km)	
within Noise Limited Contour		289136	28253.6	
not affected by terrain losses		269649	24921.3	
lost to NTSC IX		0	0.0	
lost to additional IX by ATV		0	0.0	
lost to all IX		0	0.0	

Potential Interfering Stations Included in above Scenario 1

### After Analysis

Results for:	9N AK ANCHORAGE	BPET	19960916KE	APP
		POPULATION	AREA (sq km)	
within Noise Limited Contour		289136	28253.6	
not affected by terrain losses		269649	24921.3	
lost to NTSC IX		0	0.0	
lost to additional IX by ATV		9594	320.1	
lost to all IX		9594	320.1	

Potential Interfering Stations Included in above Scenario 1



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8A AK ANCHORAGE  
USERRECORD01 APP

The following station failed the de minimis interference criteria.

8D AK ANCHORAGE  
USERRECORD01  
ERP 50.00 kW HAAT 240.0 m RCAMSL 271.0 m  
Antenna usr KTUUH

Due to interference to the following station and scenario: 1  
9N AK ANCHORAGE BPET 19960916KE  
ERP 316.00 kW HAAT 212.0 m RCAMSL 538.0 m  
Antenna 9999999999999999

Percent new DTV interference without proposal: 0.0 BPET  
19960916KE  
Percent new DTV interference with proposal: 3.3 BPET  
19960916KE

Proposed station is MX  
8A AK ANCHORAGE  
USERRECORD01 APP  
9N AK ANCHORAGE BPET 19960916KE APP

Proposal MX with BPET 19960916KE scenario 1 of station  
3

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## Analysis of Interference to Affected Station 4

Analysis of current record  
Channel Call City/State Application Ref. No.  
08 NEW ANCHORAGE  
AK USERRECORD-01

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist (km)	Status	Application	Ref.
07	KAKM	ANCHORAGE AK	0.0	LIC	BLET	-
19980917KE						
09	961115KE	ANCHORAGE AK	0.0	APP	BPET	-
19961115KE						
09	960916KE	ANCHORAGE AK	40.1	APP	BPET	-
19960916KE						

Total scenarios = 1

Result key: 2  
Scenario 1 Affected station 4

**KHANNA & GULL, Inc. - Consulting Engineers**

**Before Analysis**

**Results for: 8A AK ANCHORAGE**

**USERRECORD01**

**APP**

**HAAT 240.0 m, ATV ERP 50.0 kW**

	POPULATION	AREA (sq km)
within Noise Limited Contour	265380	30474.7
not affected by terrain losses	264372	26784.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

**Potential Interfering Stations Included in above Scenario 1**

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**FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED**